Modification proposal:	**Balancing and Settlement Code (BSC): Facilitating Microgeneration (Optional Single MPAN) (P213)**		
Decision:	The Authority[1] has decided to reject the Proposed and Alternative modification proposal		
Target audience:	National Grid Electricity Transmission Plc (NGET), Parties to the BSC and other interested parties		
Date of publication:	October 2007	Implementation Date:	n/a

Background to the modification proposal

BSC Modification P213 was raised by E.ON UK (the Proposer) on 27 April 2007 with the aim of facilitating the increased settlement of microgeneration export by reducing the complexity of the settlement process for suppliers and supplier agents. It sought to deliver this by allowing suppliers to register both imported and exported energy under a single MPAN. Under the current arrangements a supplier is required, when they register export for settlement purposes, to use a separate MPAN for export.

At present, approximately 0.8%[2] of all existing Small Scale Third Party Generation Plant (SSTPGP)[3] is registered in settlement. Whilst the volumes of energy currently not entered into settlement are likely to be low, the number of sites fitted with microgeneration is likely to increase in the future. The Proposer set out concerns that the current BSC arrangements are not facilitating the registration of export sites in settlement. In particular, the Proposer pointed to two features of the current arrangements which restricted the value of exported energy by microgenerators and limited the registration of exported energy in settlement: (a) the transaction costs associated with metering agents (who, they argue, typically charge on a per MPAN basis); and (b) the complexity of the industry arrangements associated with registering exported energy using a specific export-only NHH MPAN (such as those contained in the BSC and MRA).

The Proposer argues that as the volume of unregistered SSTPGP grows, so too will the volume of energy withheld from settlement. This energy will be smeared across NHH suppliers as part of the GSP Group Correction process and therefore have an increasing impact on the accuracy of all NHH settlement. With this in mind, if the number of unregistered SSTPGP sites increases, then the apportionment of energy through the settlement process and the overall accuracy of settlement could deteriorate.

The modification proposal

The modification group developed two modifications under P213 – a Proposed Modification and an Alternative Modification. These are summarised below and are described in more detail in the modification group's Final Modification Report (FMR) to the BSC Panel.

Proposed Modification

In relation to SSTPGP, the Proposed Modification intends to remove the need to register in settlement individual NHH MPANs for both imported and exported energy consumed or

[1] The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.
[2] According to the Proposer, in January 2007 only 23 export MPANs had been registered from approximately 3000 known SSTPGP sites.
[3] Small Scale Third Party Generation Plant means Third Party Generating Plant connected to a Distribution System at a single Boundary Point at which the aggregate maximum capacity (measured at the Boundary Point) of all Third Party Generating Plant so connected does not exceed the Small Scale Third Party Generating Plant Limit (at present it is 30kW). The limit is determined by the BSC Panel and approved by the Authority.

generated at the same site. Instead, suppliers will have the option to register both imported and exported energy under one MPAN.

This will be achieved by re-configuring the meter technical details of an existing import MPAN. That is, the existing MPAN will be assigned one of a new set of Standard Settlement Configuration (SSC) numbers so that parties and agents know that the MPAN has both imported and exported energy associated to it.

The allocation of the new set of SSC numbers will identify to the Supplier Volume Allocation Agent (SVAA) that different profiling arrangements should be used to enter consumption data into settlement for import/export MPANs. Under the Proposed Modification, the SVAA would refer to a Panel-approved substitution table which would identify the correct profile coefficients to be used for the import/export register. This will resolve the current restrictions on using profile coefficients from different Profile Classes (ie an import and export profile class) for different registers of the same Metering System and attributing energy to both registers of a Metering System simultaneously.

The Proposed Modification is intended to be used as an option for suppliers alongside the current arrangements which require that when export is registered for settlement purposes then a separate MPAN is used to the import MPAN.

Alternative Modification

The Alternative Modification intends to replicate the Proposed Modification in all respects except that it will replace the existing arrangements whereby import and export must, if registered, use separate MPANs. Under the Alternative Modification, when suppliers wish to register export generation below the SSTPGP Limit then they would be required to do so using a single, import/export MPAN.

BSC Panel[4] recommendation

The Draft Modification Report, and respondent's views to it, was considered by the BSC Panel at its meeting on 13 September 2007. The Panel voted unanimously in favour of not approving the Proposed and Alternative Modifications. They recommended rejecting both on the grounds that neither would better facilitate the Applicable BSC Objectives. Please see section 5 of the Final Modification Report for full details of the Panel's views.

The Authority's decision

Having considered the issues raised by the modification proposal, the FMR dated 14 September 2007 and the responses to Elexon's[5] consultation on the modification proposal which are attached to the FMR[6], the Authority has concluded that implementation of the modification proposal and its alternative will not better facilitate the achievement of the applicable objectives of the BSC[7].

Reasons for the Authority's decision

Ofgem fully supports measures that reduce unnecessary or inappropriate rules that create barriers to microgeneration.

[4] The BSC Panel is established and constituted pursuant and in accordance with Section B of the BSC.
[5] The role and powers, functions and responsibilities of Elexon are set out in Section C of the BSC.
[6] BSC modification proposals, modification reports and representations can be viewed on the Elexon website at www.elexon.com
[7] As set out in Standard Condition C3(3) of NGET's Transmission Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=4151

In December 2002 we approved a modification (P81) to the BSC which removed the requirement for more expensive HH metering for exported energy and for microgeneration to be settled using HH metering rather than NHH meters. We consider that more widespread use of microgeneration in people's homes and businesses could reduce carbon dioxide emissions, save energy, and avoid the need for expensive investment in electricity networks.

Whilst we welcome the work that has been done by the modification group in this area we agree with their conclusion and the view of the Panel that, in this instance, the available evidence does not suggest that either the Proposed or the Alternative Modification will better facilitate the achievement of the BSC's applicable objectives. The BSC objectives that we consider to be applicable to our decision are objectives (c) and (d). In reaching our decision, we have also had regard to our principal objective and wider statutory duties. We note in particular the relevance of the requirement to carry out our functions in a manner best calculated to contribute to the achievement of sustainable development.

We note that the Proposed Modification stems from a recommendation (Option1) made in the "Scheme to Reward Microgenerators Export Excess Electricity" report[8] from the microgeneration Work Programme (WP04) of the Distribution Working Group of the ENSG. The ENSG report indicated that the value of transaction costs associated with export metering are unknown and that the industry modification process should be used to confirm the full amount of the cost savings that could be achieved. It further suggested that, even with the reduced transaction costs it anticipated under this option, the commercial value of export to suppliers is still likely to be low.

We consider that the analysis performed as part of the modification's development does not convincingly support the original aim of the modification to reduce transaction costs, and improve settlement accuracy. We are disappointed that the costs associated with the current transaction costs and the impact of the modifications on these costs have not been properly identified and set out as was suggested in the ENSG report. The modification would introduce additional complexity into the BSC arrangements and we do not judge that this additional complexity, which has the potential to impact on settlement accuracy as well as competition in generation and supply, has been justified by a sufficiently clear explanation of the benefits that might flow from it.

The Alternative Modification, by limiting the options open to suppliers, could also reduce innovation and restrict the tariff choices suppliers could choose to offer customers in the emerging sector of microgeneration.

We set out detailed reasoning for our views below:

Objective (c) - promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

Transaction costs (Proposed Modification)

Members of the Modification Group who considered that the Proposed Modification better facilitates objective (c) of the Code said that this would be achieved by lowering transaction costs associated with registering export meters and in collecting/processing data from meters recording export from microgeneration. These transaction costs have not been identified and verified during this modification process, although members of the Modification Group considered that the current transaction costs were acting as a barrier to the development of competition and the adoption of microgeneration.

[8] A copy of the final report can be found at the following website: http://www.ensg.gov.uk/.

Evidence has not been provided to support the view that the Proposed Modification would achieve its aims. In particular, some respondents suggested that they would be unlikely to use the P213 arrangements (under the Proposed Modification there would be no requirement to register SSTPGP in settlement and if suppliers chose to do so they would still be permitted to use a separate export MPAN). Others argued that there was insufficient information to make a detailed assessment. This calls into question the anticipated benefits of the modification. Still other respondents indicated that the cost differences between managing the proposed solution and using a separate MPAN for export volumes were negligible or may, due to the added complexity of having different processes to deal with SSTPGP, actually increase.

We note that some transaction costs arise through metering agent charges. For both proposals, agents will need to be appointed, as currently happens, for data collection and meter maintenance for the export register as well as the import register. It is therefore not clear that the Proposed or Alternative Modification will significantly reduce agent costs in this area.

Complexity (Proposed Modification)

In terms of the potential impacts on competition in generation and supply some modification group members suggested that benefits would be derived by having a simpler process for registering export. However, Ofgem notes the concerns of some modification group members and industry respondents that the Proposed Modification would introduce additional complexity that could have detrimental effects to the BSC (and other related) arrangements. In particular, it has been argued that as the Proposed Modification creates an additional option for the way in which a supplier may manage the metering arrangements for an MPAN, it is likely to increase the complexity of the change of supplier processes.

The modification proposal does not present a robust assessment of the impact of this additional complexity nor does the proposal provide a full analysis of the costs that might be incurred by market participants and their agents as a result of the implementation of this proposal. As a consequence, we do not consider that sufficient evidence of the benefits has been established. We note the concerns raised by respondents that additional complexity may have a detrimental impact on competition in the supply and generation of electricity by increasing cost and reducing the quality of settlement data and that these concerns have not been addressed in the FMR.

Innovation and competition

The Alternative Modification would remove the ability under current arrangements to operate using two separate MPANs for import and export. Whilst the views of some members of the Modification Group and industry respondents indicated that this would deliver a simpler process, we share the concerns raised by Panel members, and the majority of modification group members and industry respondents that, by restricting the way that exported energy is registered in settlement, the Alternative Modification may reduce innovation in the way that customers are rewarded for small scale exported generation. For example, export-only tariffs would be discouraged, and this may lessen the extent to which exported generation is registered in settlement.

In restricting the development of competition in microgeneration Ofgem would need to be clear that this would operate in customers' interests and that this was the best way forward given the objectives. Ofgem recognises that a majority of suppliers currently offer export tariffs that are dependent on the customer agreeing import terms. However, we agree with the Panel's view that the benefit of making this a requirement of the BSC and therefore restricting customer choice has not been clearly stated in the FMR to be

greater than the potential costs imposed by the proposed restrictions to the future development of competition in microgeneration. We further note that the Proposed Modification may also have the effect of reducing innovation and competition in the microgeneration market by encouraging suppliers to link offers for export generation with a supply contract and limiting the extent to which customers are able to shop around for the best offering for their microgeneration export.

Objective (d) - promoting efficiency in the implementation and administration of the balancing and settlement arrangements

Ofgem notes the views of Panel members, modification group members and industry respondents that the Proposed and Alternative Modification would introduce complexity to the settlement arrangements, e.g. in relation to the introduction of new profiling processes and the extension of the Market Domain Data which is used to describe the configuration of an MPAN. We note the view of the Panel that the increased level of complexity could lead to a general decline in data quality and integrity. This in turn could have a detrimental effect on the accuracy of settlement, increasing costs and reducing the efficiency with which the BSC arrangements are implemented and administered.

We agree with the view of the Panel that there has not been sufficient evidence presented to support P213. We share the concerns of the Panel that insufficient information has been provided to clearly demonstrate that the cost of the increased complexity can be justified by the likely benefits that would be accrued by the Proposed or Alternative Modification.

Ofgem further thoughts

Microgeneration has the potential to make a significant contribution to meeting carbon emissions reduction targets. Ofgem is committed to ensuring that the market rules should not unduly impede the wider uptake of microgeneration and we welcome proposals to address deficiencies in the settlement arrangements.

We note that a large proportion of known microgeneration installations are not being registered in settlement. Although numbers are small at the moment we are conscious that recent improvements in the visibility of supplier offers for exports may result in an increase in the rate of take up of microgeneration[9]. This would add to the errors at the Group Grid Supply Point and amount to another source of inaccuracy in the settlement process. We would not welcome this development and challenge the industry to find solutions to this problem.

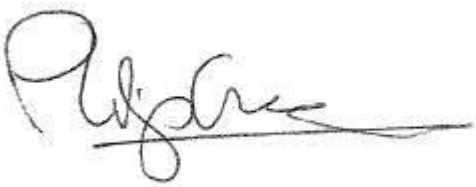
We note the aim of this modification to reduce transaction costs for suppliers in handling registered export MPANs. Although these transactions costs are small in relation to the upfront investment required in microgeneration technology, we recognise that transaction costs may contribute to the willingness of suppliers to make offers for export. By way of an illustrative example, if the value of exported energy from microgeneration is 4p/kWh and the cost to serve is £10/year, and the cost of meter reading is £6/year (source: DataMonitor) then the amount of export that would be required to be entered into settlement to break even each year would be 400kWh pa. Therefore, in this example, there would only be a positive economic value to be distributed between the supplier and microgenerator when export exceeded 400kWh pa.

However, there may be other ways in which suppliers can reduce the export metering cost base. For example, renegotiating metering contracts for import and export metering

[9] The Climate Change and Sustainable Energy Act 2006 encourages suppliers to make offers to purchase the energy exported from microgeneration. Where the Secretary of State considers it to be appropriate, they may require suppliers to purchase microgeneration from existing customers by modifying the standard conditions of suppliers' licences.

in a similar way to dual fuel and Economy 7 metering could deliver real benefits. In addition, the development of smart metering, with the prospect of remote metering and development of smart meters with import and export capabilities could play a significant role in driving down the costs of registered export.

We note that the Panel, as part of its discussions on P213 has sponsored an Issue Group, which will review whether the settlement processes are acting as a barrier to the development of microgeneration. We welcome this development and encourage further consideration of these and other potential barriers and a more rigorous analysis that identifies the transaction costs associated with the current arrangements for microgeneration and the options for reducing those transaction costs.



Philip Davies
Director of GB Markets
Signed on behalf of the Authority and authorised for that purpose.